

Amendments to the Specification

Please amend the specification as follows.

Please amend paragraph [0003], at pages 1-2, as follows:

[0003] The LCOS is one of the SLMs, and it has reflection pixels in a form of matrix, and can switch displays at a high speed using a video signal. In order to display moving pictures at a video rate, it is necessary that video of 60 frames can be displayed within one field. For that purpose, the liquid crystal response speed of at least $1/60 = 16.7$ msec or lower is required. Further, in order to display at least three colors (RGB) during that time, a response speed of 5.6 msec is required. As examples of such a high-speed response liquid crystal, there are a ferroelectric liquid crystal, an antiferroelectric liquid crystals, an OCB (optically Compensated Bend) liquid crystal and the like. ~~in~~ In the OCR liquid crystal, a Bend orientation cell is used to self-compensate changes in the visibility angle direction using birefringence of the liquid crystal, and when this liquid crystal is combined with a negative optical compensation film, a wider visibility angle is realized, as well as a high-speed response is enabled.

Please amend paragraph [0176], at page 33, as follows:

[0176] Since the field sequential color display device can obtain a position detection signal stably also at ~~highspeed~~ high-speed rotation or at elevated temperatures, the process of synchronizing the color of the color filter on the color wheel with the video which is displayed by the SLM can be carried out accurately even at high-speed rotation or at elevated temperatures.

Please amend paragraph [0197], at page 40, as follows:

[0197] In a case where the transparent plate 165 shown in figure 16 is a glass pane, reflection of light occurs on an interface between air and glass, resulting in about a 4% ~~lost~~ loss of light. Since one glass pane has two interfaces, this results in about 15% reduction in the brightness in total, summing up reductions on the light incident side and the light radiating side. In this embodiment, the loss in the brightness can be controlled to about 2% or less, by covering both sides of the transparent plate 165 on which light is

incident, with a reflection-inhibiting coating. Since the beams entering into or emerging from the transparent plate 165 are white light beams, it is preferable that the reflection-inhibiting coating is a multi-coating comprising plural laminated optical thin films which are obtained by evaporating a metal oxide. This certainly holds true for a transparent plate which is used for the light radiating opening (not shown).

Please amend paragraph [0204], at pages 43-44, as follows:

[0204] Hereinafter, a color wheel unit according to the sixteenth embodiment of the present invention will be described with reference to figure 19. Figure 19 is a schematic diagram and a cross-sectional view illustrating the color wheel unit of the sixteenth embodiment. In this sixteenth embodiment, a dividing manner of the color wheel case is different from that described in any of the aforementioned embodiments. As shown in figure 19, the color wheel case lid 191 and the color wheel case body 192 are divided a the direction of a diameter of the color wheel. A radiating-~~fin~~ fin part 193 is formed on the color wheel case lid 191, and the radiating fin part 193, a light incident opening 194 and a light radiating opening (not shown) are formed on the color wheel case body 192. A color wheel 195 and a motor 196 are fixed to the color wheel case body 192, and housed in the case, covered by the color wheel case lid 191. The color wheel case lid 191 is kept from direct contact with the color wheel case body 192, and an O-ring 197 as a cushioning material is inserted at the junction between the color wheel case lid 191 and the color wheel case body 192 to prevent a crevice from being formed. Thereby, a better sealing of the color wheel case can be obtained. In addition, by forming the radiating fin part 193 on the outer surface of the color wheel case lid 191, heat in the case can be dissipated more effectively to cool the inside of the case. Further, since the ~~O-ring~~ O-ring 197 absorbs vibrations caused by the rotations of the color wheel and the motor, noises resulting from vibrations at the junction of the color wheel case lid 191 and the color wheel case body 192 can be reduced.

Please amend paragraph [0205], at pages 44-45, as follows:

[0205] Hereinafter, a color wheel unit according to the seventeenth embodiment of the present invention will be described with reference to figure 20. Figure 20 is a

cross-sectional view illustrating the color wheel unit of the seventeenth embodiment. As shown in figure 20, a radiating fin part 203 is formed on a color wheel case lid ~~210~~ 201. A color wheel 205 and a motor 206 are fixed to the color wheel case body 202, and housed in the case. A cushioning material 204 is put between joint surfaces of the color wheel case body 202 and the motor 206, and fixed so that the color wheel case body 202 is kept from direct contact with the motor 206 as well as to ensure that no crevice is formed therebetween. Thereby, an increased sealing of the color wheel case can be obtained, and even when light which has been absorbed by the color wheel case lid 201 and the color wheel case body 202 is converted into heat, this heat is hardly conducted to the motor 206 because the thermal conductivity of rubber or resin as the cushioning material is lower than that of metal. Therefore, the conduction of heat to the motor or color wheel can be suppressed, thereby increasing the reliability. In addition, by forming the radiating fin part 203 on the outer surface of the color wheel case lid 201, the heat in the case can be dissipated more effectively, thereby cooling the inside of the case. Further, since the cushioning material 204 absorbs vibrations resulting from the rotations of the color wheel and the motor, noises caused by vibrations at the junction between the motor 206 and the color wheel case body 202 can be reduced.

Please amend paragraph [0206], at page 45, as follows:

[0206] A color wheel unit according to the eighteenth embodiment of the present invention will be described with reference to figure 21. Figure 21 is a diagram schematically illustrating the color wheel unit of the eighteenth embodiment. As shown in figure 21, a radiating ~~fin~~ fin part 213 is formed on a color wheel case lid 211. A color wheel and a motor are fixed to a color wheel case body 212, and housed in the case. Two fixing parts for fixing the color wheel unit to an optical chassis 216 are provided on the color wheel case. A cushioning material 215 is inserted at the fixing parts, and the color wheel unit is fixed to the optical chassis 216, while being kept from direct contact therewith. The cushioning material 215 is made of a vibration-isolating rubber damper. Thereby, vibrations resulting from the rotations of the color wheel and the motor are absorbed or intercepted by the cushioning material 215, whereby noises caused by the vibrations at the junction between the color wheel unit and the optical chassis are

reduced, and the vibrations of the color wheel unit are not conducted to the optical chassis. Further, when the color wheel unit can be easily removed from the optical chassis 216 like in this embodiment, the color wheel unit can be immediately replaced and the maintenance can be easily performed if the color wheel should be broken or the motor should fail.

Please amend paragraph [0227], at page 51, as follows:

[0227] The rotation controller 248 receives a video signal of each of the colors red, green and blue, and drives the rotating motor 247 in accordance with a synchronous signal included in the video signal, so that light having a band of each color is transmitted through the color wheel 246 in synchronization with the display of the LCD PANEL 251 of each of the colors red, blue and green. Here, to control the rotation of the color wheel 248 246, the position detection is required, and the rotation controller 248 detects the rotation speed and position of the color wheel on the basis of a pulse signal which is output from the rotating motor 247.

Please amend paragraph [0247], at page 55, as follows:

[0247] Figure 28 is a diagram for explaining the relationship among the color wheel 246, the condensation spot 245 and the flare diaphragm 244, seen from the radiation side of the color wheel 246, and shows a an initial state of use of the lamp 241.

Please amend paragraph [0261], at page 58, as follows:

[0261] For example, while the LCD PANEL 251 displays video corresponding to red or blue, the moving parts 301b of the flare diaphragm 301 are moved to the positions shown by the broken lines 301b', in accordance with the driving of the controlling motor 301c. ~~on~~ On the other hand, while the LCD PANEL 251 displays video corresponding to green, the moving parts 301b are moved to the positions shown by the full lines 301b". Consequently, the quantity of green light which reaches the LCD PANEL 251 is reduced, whereby the white balance in the white display is changed.

Please amend paragraph [0273], at page 60, as follows:

[0273] In this case, the air gap between the color wheel 331 and the flare diaphragm 336 when the color wheel 331, the motor 333, and the color wheel cases 334 and 335 are fixed to each other is ~~set~~ set, ~~for example~~ example, at 2 mm. It is more preferable that the air gap between the color wheel 331 and the flare diaphragm 336 is as small as possible, and when this is set at 5 mm or smaller, the shading effects can be efficiently obtained.

Please amend paragraph [0275], at page 60, as follows:

[0275] According to the so-constructed field sequential color display device, by sealing and retaining the color wheel 331 in the color wheel cases 334 and 335 with the ~~flare~~ flare diaphragm 336, the color mixture of the image of the LCD PANEL 251 can be prevented, and the safe performance can be improved. Further, when the protrusion of the flare diaphragm 336 in the color wheel cases 334 and 335 has a shape having a relatively small air resistance, the noises can be reduced. Besides, when the air gap between the color wheel 331 and the flare diaphragm 336 is 5 mm or smaller, the shading effects can be efficiently obtained.